

Sermatech International, Inc.
York County
Biddeford, Maine
A-643-71-H-A (SM)

**Departmental
Findings of Fact and Order
Air Emission License**

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Sermatech International, Inc. (SI) of Biddeford, Maine was issued air emission license A-643-71-G-R on December 6, 2002, permitting the operation of emission sources associated with their coatings facility.

SI has requested an amendment to add another Make-up Air Unit identical to the unit currently licensed.

B. Revised Fuel Burning Equipment

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Fuel Type</u>	<u>Maximum Firing Rate (scf/hr)</u>	<u>Stack</u>
Furnace #3	2.0	Nat. Gas	1942	15
Furnace #4	2.0	Nat. Gas	1942	15
Furnace #5	2.0	Nat. Gas	1942	19
Furnace #6	1.4	Nat. Gas	1352	19
Furnace #7	2.6	Nat. Gas	2524	9
Boiler #8	1.3	Nat. Gas	1263	5
Furnace #9	2.0	Nat. Gas	1942	8
Air Make-up Unit #1	3.0	Nat. Gas	3120	ambient
Air Make-up Unit #2	3.0	Nat. Gas	3120	ambient
Furnace #11	1.0	Nat. Gas	1040	11
Furnace #15	1.98	Nat. Gas	1922	10
Furnace #16	1.98	Nat. Gas	1922	7
Furnace #17	1.98	Nat. Gas	1922	6
Furnace #18	2.0	Nat. Gas	1942	29
Furnace #19	2.0	Nat. Gas	1942	30

Bold depicts new equipment added to this license.

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as defined in the Department’s regulations. This modification is determined to be a minor modification and has been processed as such. With the present hazardous air pollutant (HAP) emission limit, the facility is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. New Makeup Air Unit #2

Air Makeup Unit #2 is located outside the main building and is vented out the top of the unit; there is no stack. The unit has a heat input capacity of 3.0 MMBtu/hr firing natural gas and is not subject to the requirements of EPA New Source Performance Standard (NSPS) 40 CFR Part 60, Subpart Dc for boilers less than 10 MMBtu/hr heat input.

BACT for Makeup Air Unit #2 is the following:

- Use of natural gas.
- Emission rates for PM are based on BACT of 0.05 lb/MMBtu.
- SO₂, NO_x, CO and VOC emission rates are based on AP-42 data dated 10/96 for natural gas fired boilers smaller than 100 MMBtu/hr.
- Visible emissions from the discharge of the Air Make-up Unit shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.

C. Facility Emissions and Fuel Use Caps

SI is limited to the use of 110,000,000 cubic feet of natural gas on a 12 month rolling total basis.

Total Annual Emissions for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Combustion Units</u>	<u>Process Equipment</u>	<u>Total TPY</u>
PM	2.8	--	2.8
PM ₁₀	2.8	--	2.8
SO ₂	0.1	--	0.1
NO _x	5.5	--	5.5
CO	4.2	--	4.2
VOC	10.3		10.3
Single VOC HAP	--	1.0	1.0
Single PM HAP	--	9.9	9.9
Total VOC HAP	--	2.0	2.0
Total PM HAP	--	12.0	12.0

III. AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a non-major new source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License amendment A-643-71-H-A subject to the conditions found in Air Emission License A-643-71-G-R, and in the following conditions:

The following shall replace Condition (17) of air emission license A-643-71-G-R:

- (17) SI is limited to the use of 110,000,000 cubic feet of natural gas facility wide on a 12 month rolling total basis, based on fuel use receipts. SI shall track natural gas usage on a monthly basis. [MEDEP Chapter 115, BPT]

The following shall replace Condition (18)(E) of air emission license A-643-71-G-R:

(18) Licensed fuel burning equipment emission limits:

- E. Emissions from Air Makeup Unit #1 and Air Makeup Unit #2 each shall not exceed the following: [MEDEP Chapter 115, BPT/BACT]

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.05	0.15
PM ₁₀	n/a	0.15
SO ₂	n/a	0.01
NO _x	n/a	0.29
CO	n/a	0.22
VOC	n/a	0.02

The following shall replace Condition (18)(H) of air emission license A-643-71-G-R:

(18) Licensed fuel burning equipment emission limits:

- H. Visible emissions from the stacks serving Furnace #3, #4, #5, #6, #7, Boiler #8, Furnace #9, #11, #15, #16, #17, #18, and #19 each shall not exceed an opacity of 10 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [MEDEP Chapter 101]

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The following is new to Condition (18) of air emission license A-643-71-G-R:

(18) Licensed fuel burning equipment emission limits:

- I. Visible emissions from the discharge of Air Makeup Unit #1 and Air Makeup Unit #2 each shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-643-71-G-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 20, 2004

Date of application acceptance: May 24, 2004

Date filed with the Board of Environmental Protection: _____

This Order prepared by Mark Roberts, Bureau of Air Quality.